Geary County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 13 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Geary County economy.[1] These 13 sectors have a total direct output of approximately $252 million and support 836.7 jobs in Geary County. Running the model for all 13 sectors simultaneously produces the following results:

Agriculture Contribution in Geary County

Impact Type[2]	Employment	% of Total Employment	Total Value Added[3]	% of Gross Regional Product[4]	Output[5]	% of Gross Regional Product
Direct Effect	836.7	2%	$54,882,511	2%	$252,058,185	7%
Indirect Effect	127.1	0%	$8,179,193	0%	$16,001,334	0%
Induced Effect	56.3	0%	$3,407,480	0%	$6,905,443	0%
Total Effect	1,020.1	3%	$66,469,184	2%	$274,964,962	8%

As shown in the above table, agriculture, food, and food processing supports 1,020.1 jobs, or 3% of the entire workforce in the county. These industries provide a total economic contribution of approximately $275 million, roughly 8% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 13 agriculture, food, and food processing sectors is approximately $66 million, or 2% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 2% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

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1 Article on building a contribution analysis in IMPLAN that avoids double counting:
https://implan.com/index.php?option=com_content&view=category&id=19

2 Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

3 Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

4 GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

5 Output = Intermediate Inputs + Value Added

In the top ten by employment, Meat processed from carcasses is the top employer in the agriculture industry with 408.7 employees. This table also shows the amount of jobs that are created by the agriculture industry in Geary County.

Top 10 Industries Affected by Employment

Sector Description:	Total Employment	Total Output
Meat processed from carcasses	408.7	$195,900,749
Landscape and horticultural services	100.4	$7,758,861
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	89.9	$16,303,691
Veterinary services	76.3	$3,785,259
All other crop farming	47.2	$4,192,504
Grain farming	35.0	$8,565,120
Animal production, except cattle and poultry and eggs	29.1	$2,064,836
Support activities for agriculture and forestry	23.3	$1,451,491
Dairy cattle and milk production	23.2	$3,030,254
Bread and bakery product, except frozen, manufacturing	20.2	$2,489,586

The Meat processed from carcasses industry directly contributes approximately $196 million to Geary County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Top 10 Industries Affected by Output

Sector Description:	Total Employment	Total Output
Meat processed from carcasses	408.7	$195,900,749
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	89.9	$16,303,691
Grain farming	35.0	$8,565,120
Landscape and horticultural services	100.4	$7,758,861
Oilseed farming	5.1	$7,707,697
All other crop farming	47.2	$4,192,504
Veterinary services	76.3	$3,785,259
Dairy cattle and milk production	23.2	$3,030,254
Bread and bakery product, except frozen, manufacturing	20.2	$2,489,586
Real estate	15.1	$2,470,822

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Geary County's economy.

Sector Description:	Employment	Output
Oilseed farming	5.1	$7,707,697
Grain farming	35.0	$8,565,120
Greenhouse, nursery, and floriculture production	0.5	$61,969
All other crop farming	47.2	$4,192,504
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	89.9	$16,303,691
Dairy cattle and milk production	23.2	$3,030,254
Poultry and egg production	0.2	$64,004
Animal production, except cattle and poultry and eggs	29.1	$2,064,836
Meat processed from carcasses	408.7	$195,900,749
Bread and bakery product, except frozen, manufacturing	20.2	$2,489,586
Frozen cakes and other pastries manufacturing	0.9	$133,654
Veterinary services	76.3	$3,785,259
Landscape and horticultural services	100.4	$7,758,861
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All 105 counties in Kansas have IMPLAN models with an agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.